

L 00772-66 ENT(i)/EXP(e)/ENT(m)/EXP(i)/T/EXP(t)/EXP(b)/ED(b)-3 IJP(c) JD

ACCESSION NR: AP5012580

AUTHOR: Dzhmagidze, Sh. Z.; Shvangiradze, R. R.; Mal'tsev, Yu. A.; Gvilava, M. F. UR/0181/65/007/005/1563/1565
TITLE: Investigation of the edge of intrinsic absorption of boron
SOURCE: Fizika tverdogo tela, v. 7, no. 5, 1965, 1563-1565

TOPIC TAGS: absorption edge, IR spectrometry, absorption coefficient, valence band, conduction band, phonon

ABSTRACT: The authors investigated the edge of intrinsic absorption of spectrally pure crystalline boron of β -rhomobhedral structure with electric resistivity $(1-3) \times 10^6$ ohm-centimeter. The absorption coefficient was determined with an infrared spectrometer (IKS-6) with allowance for multiple reflection. Near the absorption edge, the absorption coefficient is practically constant and is equal to only 2 cm^{-1} , demonstrating the low concentration of the free carriers and scattering centers in the investigated samples. A plot of the square root of the absorption coefficient on the photon energy assumes the form of a broken line, indicating the presence of indirect allowed transitions of the electrons from the valence band to the conduction band, in which phonons participate. The phonon energy is 0.16 eV, corresponding to a rather high Debye temperature of 1855K. The minimum gap between bands is 0.93 eV. This differs from the published data ap-

Card 1/2

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9

SHAW, J. A.

Shvank, N. A. "Tables of Calculations of Certain Factor Curves for the Solution of the Direct Problem of Gravimetry." In the book: Sbornik Statei po Metodike Intergratsii Grevimetriceskikh Naobshchenii. Trudy Vsesoiuzn. Konkory (Tresta) Geofiz Razvedki, Moscow-Lenigrad, No. 13, 1938, pp. 13-30.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9"

Stavskii, A. A.

Stavskii, A. A. "Contribution to the Question of the Inverse Problem of Gravimetry or
Two-Dimensional Sections." In the book: Sbornik Dostizhenii po Vsesokh. Inter'vetsii Gravi-
metricheskikh Nauchnykh. Trud. Vsesokh. Konkursa (Results) Geofiz. Nauk, Leningrad,
Moscow-Leningrad, No. 10, 1938, p. 5.-73.

SHTYAN, I. A.

Shvank, I. A. "Renticu's Method for the Solution of the Inverse Problem of Gravimetry in the Case of Two-Dimensional Bodies. In the Book: Sbornik Statei po Metodike Interpretatsii Gravimetricheskikh Mablyudienii. Trudy Vsesiuza. Ventera (Tresta) Geofiz. Kur'yel'ok, Moscow-Leningrad, No. 13, 1936, pp. 79-94.

SHVAKH, V. A.

Shvakh, V. A. "Results of Testing Professor Gambarisev's Method for Determining the Mass of Tridimensional Polies by Using the Gradient Curve." Theoretical Examples. In the book: Sbornik Statei po Metodike Interpretatsii Gravimetriceskikh Nablyudenii. Trudy Issledz. Mekanich. (Fresta) Geofiz. Kanveiok, Moscow-Leningrad, No. 13, 1938, pp. 95-103.

1. SHVANK, G.A.
2. USSR (600)
4. Volga Valley - Geology, Structural
7. Determination of the thickness of the stratum in the region of the Middle Volga and an analysis of the obtained data. (Abstract) Izv.Glav.upr.geol.fon. no. 3 1947
9. Monthly List of Russian Accessions, Library of Congress, March, 1953. Unclassified.

1. SHVANK, O.A., LYUSTIKH, YE.N.

2. USSR (600)

b. Physics and Mathematics

7. Interpretation of Gravitational Observations, O.A. Shvank and Ye.N. Lyustikh. (Moscow-Leningrad, State Fuel Technical Press, 1947). Reviewed by V.V. Fedynskiy, Sov. Kniga, No. 3, 1948.

a. [REDACTED] Report U-3081, 16 Jan. 1953, Unclassified.

SHVANK, J. A.

USSR/Geophysics - Prospecting

Sept/Oct 53

"Review of Symposium 'Prospecting and Industrial Geophysics,'" (A. G. Ivanov, reviewer)

Iz Ak Nauk SSSR, Ser Geofiz, No 5, pp 474-476

Favorably reviews the symposium, edited by V. V. Fedynskiy, entitled "Razvedochnaya i promyshlennaya geofizika", No 4, Min Petrol Ind USSR, Glavnneftgeofizika, Moscow, 1952, 600 copies, price 1.50 rubies. Contributors were: I. K. Kupalov-Yaropolk, G. V. Bereza, A. I. Slutskovskiy, B. S. Temkina, P. I. Lukavchenko, O. A. Shvank, N. A. Per'kov, S. G. Komarov, I. Ye. Eydman, L. M. Yesel'son, and E. E. Fotiadi.

267T82

SHVANK, O. A.

"Approximative Evaluation of Location Depth of Masses Affecting Gravitational Anomalies".
Razved. i Promysl. Geofizika, No 10, pp 3-11, 1954.

Theoretical curves of gravitational anomalies are plotted, related to vertical projections on various depths and allowing rough evaluation of depth. Analysis of these curves indicates that the closer the production point to the surface the steeper the increase of gravitational anomaly, this anomaly nearly vanishing at great depth. As an example, the gravitational anomaly at the near Caspian low land is analyzed.
(RZhFiz, No 11, 1955)

SO: Sum No 884, 9 Apr 1956

SHVANK, O.A.

Rock density distribution throughout a geological profile and
its relation with other physical parameters. Razved.i prom.
geofiz. no.10:11-15 '54. (MIRA 13:2)
(Prospecting--Geophysical methods)
(Rocks--Density)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9

SHVANK, O.A.

Nature of gravitational anomalies in the Saratov region of the
Volga Valley. Prikl. geofiz. no.12:66-92 '55. (MLRA 8:3)
(Volga Valley—Gravity)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9"

Shvank, O. A.

USSR/Physics of the Earth - Geophysical Prospecting, 0-5

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36450

Author: Shvank. O. A.

Institution: None

Title: On the Practical Multivaluedness of the Solution of the Reverse
Problems of Gravimetry

Original
Periodical: Razved. i promysl. geofizika, 1955, No 14, 53-7

Abstract: Using numerical 2-dimensional examples it is shown that for a
given value of excess density the problem of determining the form
of the shape of a separation between media having different densi-
ties and the depth of location of this surface cannot be solved
uniquely. To obtain one definite solution, it is necessary to
have geological data.

Card 1/1

SHVANK. O. A.

"Practical Multiplicity of Solution of the Reverse Problems of Gravimetry," by O. A. Shvank. Razved. i promysl. geofizika, Issue 14, 1955, pp 3-7 (from Referativnyy Zhurnal -- Astronomiya Geodeziya, No 11, Nov 56, Abstract No 6555, by A. K. Malovichko)

Taking under consideration that curves of anomalies of the force of gravity responding to two different bodies may differ from each other by a magnitude lower than the error with which they were obtained, the writer indicates the practical multiplicity of interpretation and suggests keeping it in mind in evaluating the reliability of the solution of the reverse problem. It is shown, under conditions of a two-dimensional problem, that in the determination of the surface of separation of media with different densities, to the same curve of anomaly there may correspond surfaces with very steep or with very gentle slopes. For this reason the writer considers the problem as practically not having a single solution and for the required solution it is necessary to have additional geological data."

Sum 1239

PAGE 1 BOOK REPORTATION SOV/3820

1a(5)

Vsesoyuznyy nauchno-tekhnicheskyy institut geofizicheskikh issledovanii
Barvedicheskaya 1, proryazhovaya sputnika, vyp. 26 (Exploration and Industrial
Geophysics, Nr. 26) Moscow: Gostoptekhnizdat, 1950. 67 p. (Series: Obzornyye
proizvodstvennye oprimeniya) 4,000 copies printed.

Ed.: N.K. Polubarnyj Exec. Ed.: Ye.O. Perchinskij Tech. Ed.: A.G. Polosina.

PURPOSE: This booklet is intended for exploration geophysicists and geologists.

CONTENTS: This collection of articles includes discussions of improvements in seismic exploration techniques and interpretations of data obtained by the reflected and refracted wave method of seismic exploration. Individual articles discuss: the construction of gravitational maps; improvements in industrial borehole equipment; the standardization of radioactive electronic logging equipment; and methods for computing labor productivity in borehole operations. A number of tables for computing seismic data and conditions when using gamma logging of boreholes is described. References accompanying each article.

Card 1/3

- | | |
|--|--|
| <p>Furor, Yu.G., and B.P. Yaroshov. Marine Seismic Exploration
Uspenskiy, A.F., and Ye.M. Chernyshev. Seismic Soundings in Determining the
Velocities of Elastic Waves</p> | <p>Zaporozhets, V.M., and V.V. Sulin. Differential Spectra of Radiation
From Artificial Radiators</p> |
| <p>Tal'nikov, B.B. Method of Plotting Refracting Horizons in the Presence
of a Mean Velocity Gradient of Arbitrary Direction</p> | <p>Sachins, B.B. An Example of a Rational Selection of an Isocanaly
Cross-Section for Resistivity Maps</p> |
| <p>Sokolik-Dobr. Accuracy of an Approximate Evaluation of Elevation
Differences Based on a Formula of the Gravity Effect of an Inclined
Bed</p> | <p>Belyakov, I.A. Programs for Determining the Specific Resistivity
of Formation Water</p> |
| | <p>Fishchenko, A.Ye. On the Problem of Developing Methods for Computing
Labor Productivity in Geophysical Operations</p> |
| | <p>AVAILABLE: Library of Congress</p> |

N 12-31-59

Card 2/3

S/169/61/000/012/024/089
D228/D305

AUTHOR:

Shvank, O. A.

TITLE

Calculating the first and second vertical
derivatives of gravity anomalies

PERIODICAL:

Referativnyy zhurnal, Geofizika, no. 12, 1961,
33-34, abstract 12A330 (v sb. Prikl. geofizika,
no. 27. M., 1960, 131-142)

TEXT The construction of curves of different derivatives over theoretical bodies at a scale corresponding to the accuracy of the derivatives' calculation is suggested. It is shown that the possibilities of using W_{zz} and W_{zzz} are considerably restricted by the high requirements for the accuracy of determining the values of W_z . Application of small-radius pallets with the aim of decreasing the errors related to the formulas' approximate character strongly increases fortuitous mistakes

Card 1/2

SHVANK, O.A.

Characteristics of different gravity derivatives with regard to
the interpretation of gravimetric observations. Razved. i
prom. geofiz. no. 35:55-61 '60.
(Prospecting--Geophysical methods)
(Gravity)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9

SHVANK, O.A.

Establishing the nature of a geological fault by gravimetric data.
Razved. i prom. geofiz. no.38:15-17 '60. (MIRA 14:3)
(Gravity prospecting)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9"

SHVANK, O.A.

Analytical continuation of gravity anomalies downward and estimation
of the depth of the disturbing masses. Prikl. geofiz. no.29:120-122
'61. (MIRA 14:6)
(Gravity prospecting)

S/169/62/000/005/029/093
D228/D307

AUTHOR: Shvank, O. A.

TITLE: Example of estimating the accuracy of determining the depth of the disturbing mass in the method of integral conversions of the gravity field

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 5, 1962, 31, abstract 5A245 (V sb. Razved. i promysl. geofiz., no. 41, M., 1961, 76-80)

TEXT: The accuracy of the integral conversion method is appraised on a theoretical model. This method is used in solving a number of practical problems, since, in the author's opinion, it is possible to determine the maximum feasible depth at which the crystalline basement's surface lies by means of such a technique. Consideration of a theoretical example showed that the method can only give an approximate estimate of the depth of a horizontal layer's upper surface. The precision of this estimate is the same or just a little higher than is the case with the methods normally used,

Card 1/2

S/169/62/000/005/029/093
D228/D307

Example of estimating ...

but the integral conversion method is very laborious. [Abstractor's note: Complete translation.]

Card 2/2

SHIVANK, O.A.

Theoretical curves of the vertical gravity component and
their use in interpreting gravity anomalies. Razved.i prom.
geofiz. no.44:38-100 '62. (MIRA 1527)
(Gravity prospecting)

SHVANK, O.A.

Some results of gravity surveying in the southeastern area
of the European part of the U.S.S.R. Trudy NVNIIGG no.1:
105-109 '64. (MIRA 18:6)

SHVANK, G.A.

Solution of a gravimetric inverse problem for some simple bodies.
Razved. geofiz no.2:72-74 '64. (MIRA 18:5)

ACC NR: AP6030341

(A,N)

SOURCE CODE: UR/0358/66/035/004/0498/0499

AUTHOR: Shvan'kov, M. A.

ORG: Department of Entomotoxicology, Institute of Medical Parasitology and Tropical Medicine im. Ye. I. Martsinovskiy, Ministry of Health SSSR, Moscow (Otdel entomotoksikologii Instituta meditsinskoy parazitologii i tropicheskoy meditsiny Ministerstva zdravookhraneniya SSSR)

TITLE: Economic comparison of various types of fly control methods in the Krasnoyarsk region

SOURCE: Meditsinskaya parazitologiya i parazitarnyye bolezni, v. 35, no. 4, 1966, 498-499

TOPIC TAGS: pest control, aerial spraying, PEST/C/02

ABSTRACT: Results of aerial dusting (1958-1959) and aerial spraying (1960) of breeding areas near a human settlement against imago and destruction of larvae in their breeding places (1962-1963) in one of the districts of the Krasnoyarsk Region are compared. Aerial dusting (10% DDT dust at 50 kg/hectare) twice during the summer season of 575 hectares cost 8.53 rubles/hectare and aerial spraying at 75 l/hectare of active emulsion (5 kg industrial DDT), 8.37 rubles/hectare. Antilarval treatment was made three

Card 1/2

UDC: 614.449.57.003.12(571.51)

ACC NR: AP6030341

times by the Institute of Medical Parasitology and Tropical Medicine im. Ye. I. Martsinovskiy in a river (500 m³/sec flow) near the same settlement. It was concluded that three-year treatment of rivers using a DDT emulsion (0.1—0.2 g/m³ of water) in 20—30 min is required. Cost of each treatment varies with water flow in the river at the time of treatment, preparation dose, and exposure. The basic expenditure for this method is the cost of chemical pest-killers (50—60% of total cost). All three methods gave satisfactory results. Total cost of aerial dusting was 9817.94 rubles; aerial spraying, 9630.08 rubles, and antilarval treatment, an average 329.9 rubles/yr, which is 30 times cheaper than the cost of the two other methods tested.

[WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: 16Feb65/

Card 2/2

1. YAKOVLEV, I. A.; SHVANKOV, M. M., Engs.
2. USSR 600
4. Moscow - Transportation, Automotive
7. Electric trucks and electromobiles for municipal transportation in the capital,
Gor. khoz. Mosk., 21, No. 11, 1947.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

TIMOFEYEVA, L.V.; MITROFANOV, A.M.; MARKOVICH, N.Ya.; MURAV'YEVA, T.V.;
SHVAN'KOV, M.Ye.; TUPITSYN, L.F.

Successful results in controlling bloodsucking black flies
(Diptera, Simuliidae) by treating the breeding grounds; preliminary
report. Med.paraz.i paraz. bol. no.1:3-9 '62. (MIRA 15:5)

1. Iz entomologicheskogo otdela (zav. -- prof. V.N. Beklemishev)
i otdela entomotoksikologii (zav. -- prof. V.A. Nabakov) Instituta
meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye.I.
Martsinovskogo (dir. -- prof. P.G. Sergiyev) Ministerstva zdra-
voохранения СССР.
(BLACK FLIES--EXTERMINATION) (DDT (INSECTICIDE))

SAVANIEV, M.Ye.

Results of the control of blood-sucking blackflies (*Simulium*) by
the treatment of breeding places. M.i. paraz. i paraz. bcl. 34
no. 338-41. L-8 165. (MIRA 18:8)

T. Otdeleniya entomotsikologii Instituta meditsinskoy parazitologii
i tropicheskoy meditsiny imeni Ye. I. Martashevskogo Ministerstva
zdravookhraneniya SSSR, Minsk.

LOSHCHITS, M.F., polkovnik; ALESHIN, S.D., polkovnik; ASTASHENKOV, P.T., inzh.-polkovnik; ISACHENKO, S.M., polkovnik; SIDEL'NIKOV, I.I., polkovnik; SHVANKOV, N.P., polkovnik; NOVIKOV, M.B., kapitan 2 ranga; TOMKOV, A.A., red.; KONOVALOVA, Ye.K., tekhn. red.

[Heroes and exploits] Geroi i podvigi. Moskva, Voenizdat,
1963. 370 p. (MIRA 16:3)
(Heroes)

VILYANSKIY, M.P., kand.med.nauk; LEBEDEV, M.S.; SHVANKOVA, Z.P.

Case of acute hemorrhage in chorioepithelioma. Akush. i gin.
35 no.3:122-123 My-Je '59. (MIRA 12:8)

1. Iz bol'nitsy (glavnnyy vrach - zasluzhennyj vrach RSFSR
Ye.A.Kikabidze), g. Zhukovskiy Moskovskoy oblasti.
(CHORIOCARCINOMA, case reports
uterus, with acute hemorrh. (Rus))
(UTERUS NEOPLASMS, case reports
choriocarcinoma, with acute hemorrh. (Rus))

SHVANOV, S.F.

Highly productive automatic machine for the manufacture of spring washers. Kuz.-shtam. proizv. 2 no.7:44 J1 '60.
(MIRA 13:8)

(Washers (Mechanical engineering))
(Metalworking machinery)

SHVANOV, V.N.; MARKOV, A.B.

Graduation analysis of sandstone in thin sections. Izv. vys.
ucheb. zav.; geol. i razv. 3 no.12:49-55 D '60. (MIRA 14:5)

1. Leningradskiy gosudarstvennyy universitet imeni A. A. Zhdanova.
(Sandstone—Analysis)
(Particle size determination)

SHVANOV, V. N.; MELAMED, Ya. R.

Mineralogy of lower Cretaceous red beds in the Tajik Depression.
Vest. LGU 15 no. 18:66-74 '60. (MIRA 13:9)
(Tajik Depression--Rocks, Sedimentary)

SHVANOV, V. N.

Cand Geol-Min Sci - (diss) "Stratigraphy, lithology, and conditions of the formation of Lower Cretaceous deposits of Western Tadzhikistan." Leningrad, 1961. 18 pp; 1 page of tables; (Ministry of Higher and Secondary Specialist Education RSFSR, Leningrad Order of Lenin and Order of Labor Red Banner Mining Inst imeni G. V. Plekhanov); 180 copies; price not given; (KL, 10-61 sup, 209)

SHVANOV, V.N.

Types of layers and stratigraphy of the lower Cretaceous deposits
of western Tajikistan. Izv. Otd. geol.-khim. i tekhn. nauk AN Tadzh.
(MIRA 14:9)
SSR No.1:69-86 '61.

1. Leningradskiy posudarstvennyy universitet.
(Tajikistan--Geology, Stratigraphic)

SHVANOV, V.N.; PISKIZHOV, I.M.

Measuring the shape of sand grains under the microscope. Vast.LGU
16 no.24:155-156 '61. (MIRA 14:12)
(Measuring instruments)

SHVANOV, V.N.; GOLOVENOK, V.K.

Lev Borisovich Rukhin's works on paleogeography. Uch.zap. LGU
(MIRA 16:11)
no.310:14-21 '62.

SHVANOV, V.N.; MARKOV, A.B.

Correlation of the results of granulometric analyses of sand rocks
in thin-sections, loose preparations, or by the use of the sieve
method. Uch.zap. LGU no.310:68-80 '62. (MIRA 16:11)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9

SHVANOV, V.N.

Early Cretaceous paleogeography of western Tajikistan. Uch.
(MIRA 16:11)
zap. LGU no.310:161-179 '62.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9"

SHVANOV, V. N.

Distribution of minerals in the granulometric fractions of alluvial
and eolian sands. Vest LGU 19 no. 6:155-159 '64. (MIRA 17:5)

SHVARDOV, V.N.

Composition and conditions governing the formation of the Zilair
schist-graywacke formation in the Southern Urals. Vest. LGU 19
no.18:23-34 '64. (MIRA 17:11)

SHVANOV, V.N.

Rhythmical change in the mineral composition of clastic rocks
in the Neogene section of the Tajik Depression. Lip. i pol.
iskop. no.6:91-92 N-D '64. (MIRA 18:3)

1. Leningradskiy gosudarstvennyy universitet.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9

SEVANOY, M.M.

Convergence of geological terigenous formations and formation
analysis. Vest. LGU 20 no.12:5-36 '65. (MIRA 18:8)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9"

DAGIS, A.S.; SHVANOV, V.N.

Discovery of Middle Triassic in the Taurian series of the
Crimea. Dokl. AN SSSR 164 no.1:161-163 S '65. (MIRA 18:9)

1. Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova
i Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.
Submitted May 22, 1965.

IKONNIKOVA, N.F.; SHVANSKAYA, A.M.

Frasnian stage of the Piatali-Tau. Trudy Sred.-Az. politekh.
inst. no.12:148-152 '61.

(MIRA 18:12)

SHVANSKIV, A.M., inzhener; FOTIYEV, RAYA, S.A., inzhener.

Mechanized production of artificial horn products. Leg. pron. 17
no.6:50-51 Je '57. (M.Rn 10:8)
(Bone products)

ARNOL'DOV, I.E.M.; GONTA, T.T. [Honta, T.T.]; KALECHITS', V.V.;
MIKHNIENKO, O.I.; METTIN, Ya.M.; MURZIN, O.M.; SAVICH, D.M.;
TOMASHCHUK, V.D.; SHVANSKIY, A.M. [Shvans'kyi, A.M.];
HUKAVISHNIKOVA, A.I., red.; RAYTBURD, L., red.; GORKAVENKO, L.
[Horkavenko, L.], tekhn.red.

[Chemical industry of the Ukraine] Khimichna promyslovist'
Ukrainy. Kyiv, Derzh.vyd-vo tekhn.lit-ry URSR, 1960. 128 p.
(MIRA 13:11)

(Ukraine--Chemical industries)

SHVANTS MAN, L. M.; Cand Tech Sci.

"Aerodynamics of the pneumatic transport of cotton."
Tashkent, 1960.

1. Acad Sci. UZSSR, Inst of Mechanics. KL, 3-61, 222

TOPCHIYEV, A.V., akademik, glavnnyy redaktor; TRAPEZNIKOV, V.A., otvetstvennyy redaktor; LIBENSON, D.Ya., redaktor; STRAKHOVA, L.P., redaktor; ~~SHVARTZ~~, redaktor; KHACHATUROV, G.S., redaktor; ASTAF'YEVA, G.A., tekhnicheskiy redaktor

[Session of the U.S.S.R. Academy of Sciences on the scientific problems of automatization of production, October 15-20, 1956; plenary meeting] Sessiya Akademii nauk SSSR po nauchnym problemam avtomatizatsii proizvodstva, 15-20 oktiabria 1956 g.; plenarnye zasedaniya. Moskva, 1957. 271 p. (MLRA 10:3)

1. Akademiya nauk SSSR. 2. Chlen-korrespondent Akademii nauk SSSR
(for Trapeznikov)
(Automatic control) (Information theory)
(Electronic calculation machines)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9

SHVARABOVICH, A. F.

Protective devices for abrasive machines Moskva, Gos. nauchno-tehn. izd-vo mashinostroit. lit-ry, 1946. 58 p. (52-41533)

TJ280.S53

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550320015-9"

SHVAREV, A.I., podpolkovnik med.sluzhby, kand.med.nauk

Expert evaluation of neurological microsymptoms. Voen.med.zhur.
no.9:26-31 S '57. (MIRA 11:3)

(NERVOUS SYSTEM, diseases,
diag., expert evaluation of micr-symp. (Rus)

TRIUMFOV, Aleksandr Viktorovich; SHVAREV, A.I., red.; RULEVA, M.S.,
tekhn.red.

[Topical diagnosis of diseases of the nervous system; a concise
manual] Topicheskaya diagnostika zabolеваний nervnoi sistemy:
kratkoe rukovodstvo. Izd.4., dop. i perer. Leningrad, Gos.
izd-vo med.lit-ry Medgiz, Leningr. otd-nie, 1959. 274 p.
(MIRA 14:3)

(NERVOUS SYSTEM--DISEASES)

SHVAREV, A.I.; REMEZOV, P.I.

Clinical-virological studies on lymphocytic choriomeningitis.
Vop.virus. 4 no.3:323-326 My-Je '59. (MIRA 12:8)

1. Klinika nervnykh bolezney No.2 i kafedra mikrobiologii
Voyerno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova,
Leningrad.

(VIRUS DISEASES, case reports,
lymphocytic choriomeningitis (Rus))

SHVAREV, A.I.

Diagnosis and expert examination in epilepsy. Vop. psikh. i nevr.
no.5,158-167 '59. (MIRA 14:5)

1. Iz 2-y kliniki (nachal'nik - prof. A.G.Panov) kafedry nervnykh
bolezney Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova
(nachal'nik - prof. S.I.Karchikyan).
(EPILEPSY)

ZACHEPITSKIY, Rafail Aleksandrovich; YAKOVLEVA, Yekaterina Konstantinovna;
SHVAREV, A.I., red.; SREVCHENKO, F.Ya., tekhn. red.

[Role of improper upbringing in the genesis of neuroses] Rol' nepra-
vil'nogo vospitanija v proiskhozhenii nevrozov. Leningrad, Gos. izd-vo
med. lit-ry Medgiz, Leningr. otd-nie, 1960. 39 p. (MIRA 14:7)
(NERVOUS SYSTEM—DISEASES) (CHILDREN—MANAGEMENT)

ASTAKHOV, Sergey Nikolayevich; SHVAREV, A.I., red.; CHUNAYEVA, Z.V.,
tekhn. red.

[Prevention and treatment of disorders in cerebral circulation]
Preduprezhnenie i lechenie rasstroistv mozgovogo krovo-
obrashcheniya. Leningrad, Medgiz, 1961. 98 p. (MIRA 15:2)
(CEREBROVASCULAR DISEASE)

GRATSIANSKAYA, Lyubov' Nikolayevna, doktor med. nauk; ROZENTSVIT,
Grigoriy Emmanuilovich, kand. med. nauk; SHVAREV, A.I.,
red.; CHUNAYEVA, Z.V., tekhn. red.

[Clinical aspects of occupational neurotoxicoses] Klinika pro-
fessional'nykh neirotoksikozov. Leningrad, Medgiz, 1961. 198 p.
(MIRA 15:1)
(NERVOUS SYSTEM—DISEASES) (INDUSTRIAL TOXICOLOGY)

KARCHIKYAN, Stepan Ivanovich, prof.; SHVAREV, A.I., red.; SAFRONOVA, I.M., tekhn. red.

[Traumatic lesions of peripheral nerves; diagnosis and fundamental principles of treatment] Travmatischekie po-razheniya perifericheskikh nervov; raspoznavanie i osnovnye printsyipy lecheniya. Leningrad, Medgiz, 1962. 215 p. (MIRA 16:8)

(NERVES, PERIPHERAL—WOUNDS AND INJURIES)

SHVAREV, A.I., dotsent

Therapeutic tactics in cerebral insults. Vop. psikh. i
nevр. no.9:143-151 '62. (MIRA 17:1)

1. Vojenno-meditsinskaya ordena Lenina akademiya imeni
Kirova.

ARONOVICH, Gedaliy Davydovich, prof.; OPPEL', Varvara Vladimirovna; TRET'YAKOVA, Valentina Aleksandrovna; SHVAREV, A.I., red.; BUGROVA, T.I., tekhn. red.

[Home care for patients with vascular lesions of the brain] Pomoshch' na domu bol'nym s sosudistymi porazheniami golovnogo mozga. Leningrad, Medgiz, 1963. 47 p. (MIRA 17:1)

SEMENOVA-TAN-SHANSKAYA, Vera Viktorovna; SIVAREV, A.I., red.;
LEBEDEVA, G.T., tekhn. red.

[Acute leukemia and the nervous system] Ostryi leikoz i
nervnaia sistema. Leningrad, Medgiz, 1963. 95 p.
(MIRA 16:12)

(LEUKEMIA) (NERVOUS SYSTEM--DISEASES)

GARSHIN, Mikhail Isayevich; SHVAREV, A.I., red.; LEBEDEVA, Z.V.,
tekhn. red.

[Otogenous meningitis] Otogenyi meningit. Leningrad,
Medgiz, 1963. 198 p.
(MENINGITIS) (EAR--DISEASES)

OPEL', Varvara Vladimirovna; SHVAREV, A.I., red.; BUGROVA, T.I.,
tekhn. red.

[Restoration of speech in aphasia] Vosstanovlenie rechi
pri afazii; metodicheskie ukazaniia. Leningrad, Lenmedgiz,
1963. 104 p.
(MIRA 17:1)



PANOV, A.G.; REMEZOV, P.I.; SHVAREV, A.I.

Diagnosis of lymphocytic choriomeningitis. Zhur. nevr. i psikh.
(MIRA 17:5)
63 no.10:1441-1444 '63.

1. Voyenno-meditsinskaya ordena Lenina akademiya imeni Kirova,
Leningrad.

DOTSENKO, Stepan Nikolayevich; PERVOMAYSKIY, Boris Yakovlevich;
SHVAREV, A.I., red.

[Neuroses; their clinical aspects and treatment] Nevrozy;
klinika i lechenie. Leningrad, Izd-vo "Meditina," 1964.
185 p. (MIRA 17:5)

TRIBEEFOV, Aleksandr Viktorovich; CHVARCH, A.I., dots., red.;
CHMYRA, D.Ye., red.

[Topical diagnosis of diseases of the nervous system; a
brief manual] Topicheskaiia diagnostika zabolеваний
nervnoi sistemy; kratkoe rukovodstvo. Izd.5. Leningrad,
(MIRA 17:8)
Meditina, 1964. 258 p.

SHVAREV, A.I.

Lymphocytic choriomeningitis; current state of the problem.
(MIRA 13:12)
Vop. psikh. nevr. no.10:19-43 '64.

1. Kafedra nervnykh bolezney (nachal'nik kafedry - prof. A.G.
Panov) Vojenno-meditsinskoy ordena Lenina akademii imeni S.M.
Kirova, Leningrad.

SHVAREV, A.I.

Spinal and radicular forms of lymphocytic choriomeningitis.
Zhur. nevr. i psikiat. 64 no.9:1290-1294 '64. (МНР 17:12)

1. Kafedra nervnykh bolezney (nachal'nik - prof. A.G. Panov)
Voyenno-meditsinskoy ordona Lenina akademii im. S.M. Kirova,
Leningrad.

L 42177-65 EWG(a)-2/EWG(c)/EWG(j)/EWG(r)/EWG(v)/EWT(1)/FS(v)-3 Pb-4/
Pe-5 AFETC/AFMDC/AMD/APGC DD

ACCESSION NR: AT5010625

UR/3147/64/003/000/0255/0259

44

B+1

AUTHOR: Gusinskiy, Z. S.; Shvarev, A. I.

TITLE: A severe spinal type of decompression sickness with a favorable outcome

SOURCE: AN SSSR. Institut evolyutsionnoy fiziologii. Funktsii organizma v usloviyakh izmenennoy gazovoy sredy, v. 3, 255-259

TOPIC TAGS: decompression sickness, spinal aeroembolism allergy, allergic vaso-motor reaction, diver, pressure chamber

ABSTRACT: The spinal type of decompression sickness is only rarely encountered among divers. In 12 years only 4 such cases were registered at the clinic of nervous diseases of the Military Medical Academy im. Kirov. The authors consider one such case in which the diver in question had a particularly severe spinal type of decompression sickness, complicated by injury to the lungs, burns of the body, bed sores, and cystitis. In spite of these factors, complex and prolonged treatment resulted in a comparatively favorable outcome of the illness.

Card 1/5

L 42172-65

ACCESSION NR: AT5010625

The patient, together with two other divers, had been undergoing routine training in a pressure chamber. Pressure in the chamber was raised to 6 atm during 8 min and maintained for 21 min, after which it was reduced to 1.8 atm. At the decompression stage in which the pressure ranged from 3.0 to 2.5 atm, the patient felt pain in the area of the neck and paresthesia of the lower extremities. He assumed that these symptoms were due to an uncomfortable position in the chamber. After he had changed his position, the pain and paresthesia disappeared but a certain numbness of the legs remained. At the end of the training period, which lasted a little over two hours, the other two divers felt no aftereffects. However, the patient felt pains in the chest and a decrease of feeling in the lower part of his body immediately after leaving the chamber. A weakness in the legs caused him to have difficulty in leaving the chamber.

Some 55 min after leaving the chamber, he was returned to the chamber for recompression treatment. When the pressure was raised to 1.5 atm the patient felt much better, and at 3 atm symptoms of decompression sickness disappeared. The patient felt well and performed various movements of his upper and lower extremities. Decompression was then performed.

Card 2/5

L 42177-65

ACCESSION NR: AT5010625

according to normal schedule. Five hours later, when the pressure was reduced to 0.9 atm, the condition of the patient deteriorated sharply: pains arose in the chest, and the skin of the limbs, the trunk, the neck, and the back of the head became numb. The pressure was raised to 5 atm, but the condition of the patient did not improve. After the patient had spent 7 hr in the chamber the physician ordered the pressure to be raised to 7 atm, then to 8, and finally to 9 atm. The condition of the patient still did not improve. During maximum pressure, signs of pronounced nitrogen narcosis appeared. On the following day the physician was able to enter the chamber and determine that the patient was suffering from a paralysis of the legs, a paresis of the arms, infarcts of the lungs (complicated by double pneumonia), and extensive burns on the buttocks and shoulders (which resulted from the patient having fallen during the night from the cot to the hot metal floor and, because of his paralysis, having remained there). The physician treated the burns and gave the patient an antitetanus shot and injections of camphor, caffeine, and antibiotics.

Since there was no deviation in the decompression schedule during the training period, and since the other two divers felt well, the reason for

Card 3/5

L 42177-65
ACCESSION NR: AT5010625

onset of sickness during decompression must be ascribed to peculiarities of the organism of the patient or to the chance location of gas bubbles in the area of the spinal cord. It was also assumed that the particularly severe form of decompression sickness from which the patient suffered was due to the 55-min delay between the initial stay in the training chamber and his return to the pressure chamber for treatment.

After many months the patient's recovery was almost complete, except for a slight tendency toward spastic paraparesis and a reduced sensitivity of the skin of the legs. In the course of his treatment it was determined that the patient was allergic to various substances. The onset and severity of the decompression sickness suffered by the patient were apparently due not only to aeroembolism of the spinal cord but also to the appearance of extensive edema in the spinal cord due to allergic reactions. The combination of these two pathogenic factors determined the high degree to which the spinal cord was affected, and this was aggravated by the retarded re-entry into the decompression chamber for treatment. Liquidation of the allergic edema brought about a significant restoration of spinal cord functions. The case indicates the importance of identifying persons who are

Card 4/5

L-42177-65

ACCESSION NR: AT5010625

inclined to suffer from allergic vasomotor reactions in selecting candidates/
for diver training.

ASSOCIATION: none

SUBMITTED: 00

NO REF Sov: 000

ENCL: 00

OTHER: 000

SUB CODE: LS, PH

ATD PRESS: 3240-F

P-JB
Card 5/5

SHVAREV, A.M., inzhener-mayor

Working with the automatically controlled fuel system
during flight. Vest.Vozd. Pl. no.2:74-79 P '60.
(MIRA 13:7)

(Airplanes--Fuel systems)
(Automatic control)

SHVAREV, B.L.

Tightening ties with dowels. Put' i put. khox. no.10:19 0 '57.
(MLRA 10:11)

1. Nachal'nik distantsii, stantsiya Sol'vychegodsk.
(Railroads--Ties)

SHVAREV, Boris Leonidovich, inzh.; SERGEEVA, A.I., red.; BOBROVA, Ye.N.,
tekhn. red.

[Increasing the length of service of wooden ties] Prodlenie sroka
sluzhby dereviannykh shpal. Moskva, Gos. transp. zhel.-dor. izd-vo,
1958. 19 p. (MIRA 11:9)

(Railroads—Ties)

SHVAREV, B.L.

More about spike drawers. Put' i put. khoz. no.2:14 P '58.
(MIRA 11:3)

1. Nachal'nik distantsii, g. Sol'vychegodsk.
(Railroads--Tools and implements)

SHVAREV, B.L., inzh.

Disinfection of wooden screws and disc fastenings. Put i put.khoz.
no.11:35 N '58. (MIRA 11:12)

1. Nachal'nik distantsii puti, stantsiya Sol'vychegodsk Pechorskoy
dorogi. (Wood--Preservation) (Railroads--Rails--Fastenings)

PAVLOV, G.I.; SHVAREV , B.L.

Raised track repair. Put' i put. khoz. no.2:12-16 F '59.
(MIRA 12:3)

1.Nachal'nik distantsii puti, st. Izyum Donetskaya doroga (for
Pavlov). 2.Nachal'nik distantsii puti, st. Sol'vychegodsk Pechor-
skaya doroga (for Shvarev).
(Railroads--Track)

SHVAREV, B.I.

Speed the adoption of advanced practices. Put' i put.khoz. 5 no.12:
8 D '61. (MIRA 15:1)

1. Nachal'nik proizvodstvennogo otdela sluzhby puti Moskovskoy dorogi.
(Railroads--Maintenance and repair)

SHVAREV, Boris Leonidovich; KANTOR, V.B., inzh., retsenzent; SERGEYEVA,
A.I., inzh., red.; KHITROVA, N.A., tekhn. red.

[Lengthening the service life of wooden ties] Prodlenie sroka
sluzhby dereviannykh shpal. Moskva, Vses. izdatel'sko-
poligr. ob"edinenie M-va putei soobshcheniya, 1962. 45 p.
(MIRA 15:3)

(Railroads--Ties)

SHVAREV, B.L., inzh.; SREVCHENKO, I.G.

Improving business accounting. Put' i put.khoz. 9 no.4:21-22 '65.
(MIRA 18:5)

1. Nachal'nik Aksakovskoy distantsii Kuybyshevskoy dorogi.

SHVAREV, I.F.

Effects of spherophysin, salsolin and papaverine on blood pressure
in experimental atherosclerosis, author's abstract. Farm. i toks
21 no.5:85-88 S-0 '58 (MIRA 11:11)

1. Kafedra farmakologii I Moskovskogo ordena Lenina meditsinskogo
instituta imeni I.M. Sechenova.

(BLOOD PRESSURE, eff. of drugs on,
papaverine, salsolin & spherophysin, in exper.
arteriosclerosis (Rus))

(ARTERIOSCLEROSIS, exper
eff. of papaverine, salsolin & spherophysin on blood
pressure (Rus))

(PAPAVERINE, effects
on blood pressure in exper. arteriosclerosis (Rus))

(ALKALOIDS, effects
salsolin & spherophysin, on blood pressure in
arteriosclerosis (Rus))

SHVAREV, I. F., Candidate Med Sci (diss) -- "The effect of spherophysin, salosolin, and papaverine on the cardiovascular system in experimental atherosclerosis". Moscow, 1959. 15 pp (First Moscow Order of Lenin Med Inst im I. M. Sechenov), 200 copies (KL, No 25, 1959, 142)

SHVAREV, I.F.

Problem of the mechanism of vasodilator activity of spherophysine
and papaverine. Farm.i toks. 23 no.3:242-245 My-Je '60.
(MIRA 14:3)

1. Kafedra farmakologii (zav. - deystvitel'nyy chlen AMN SSSR
prof. V.V.Zakusov) I Moskovskogo ordena Lenina meditsinskogo
instituta imeni I.M.Sechenova.

(AUTONOMIC DRUGS) (PAPAVERINE)
(VASOMOTOR DRUGS)

SHVALEV, I.P.

Apparatus for recording the voluminal rate of blood flow. Biol.
ekspl. biol. i med. 54 no.8:120-121 Ag '62.

(MIRA 17:11)

I, Iz kafedry farmakologii (zav. - deystvitel'nyy chlen AMN SSSR
V.V. Zakusov) I Moskovskogo ordena Lenina meditsinskogo instituta
imeni I.M. Sechenova. Predstavlena deystvitel'nym chlenom AMN SSSR
V.V. Zakusovym.

SHVAREV, I.F.

Pharmacological studies on osthole. Farm. i toks. 27 no.4:
391-393 Jl-Ag 164. (MIKA 17:11)

1. Laboratoriya farmakologii (zav. - prof. A.D. Turova) nediko-
biologicheskogo otdela Vsesoyuznogo nauchno-issledovatel'skogo
instituta lekarstvennykh i aromaticheskikh rasteniy, Moskva.

TSETLIN, A.L.; NIKONOV, G.K.; SHVAREV, I.F.; PIMENOV, M.G.

Antineoplastic activity of natural coumarins. Rast. res. 1 no.4:
507-511 ' 65
(MIRA 19:1)

l. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh
i aromaticheskikh rasteniy, Moskva. Submitted April 6, 1965.

SHVAREV, N.

The best driver of the automotive transportation trust.
Avt. transp. 36 no.10:52 U '58. (MIRA 13:1)
(Highway transport workers)

BYCHKOVA, Z.N., inzh.; AGARYSHEVA, Z.I., inzh.; SHVAREV, N.M., inzh.;
SEMENOV, V.P., inzh.

Vacuum rectification of lactones. Masl.-zhir. prom. 27 no.9:27-
29 S '61. (MIRA 14:11)

1. Kaluzhskiy kombinat sinteticheskikh dushistykh veshchestv.
(Lactones)

SHVAREV, V.

Give more attention to advertising. Fin. SSSR 23 no.8:65 Ag
'62. (MIRA 15:8)

1. Nachal'nik strakhovoy inspeksi Rigi.
(Riga--Advertising--Insurance)

SHVAREV, V.A., kand.istorich.nauk, otv.red.; BELYAYEV, A.A., red.
(g.Vladivostok); BELIKOVA, L.I., kand.istoricheskikh nauk,
red.; VISHNEVSKIY, V.M., kand.istoricheskikh nauk, red.;
KRUSHANOV, A.I., kand.istoricheskikh nauk, red. (g.Vladi-
vostok); LESHKEVICH, V.V., kand.istoricheskikh nauk, red.
(g.Vladivostok); MULENKOV, A.G., kand.istoricheskikh nauk,
red.; SHADRIN, K.M., tekhn.red.

[The Far East during forty years of Soviet government]
Dal'nii Vostok za 40 let Sovetskoi vlasti. Komsomol'sk-na-
Amure, 1958. 552 p. (MIRA 12:12)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Dal'nevostochnyy filial, Vladivostok.
(Soviet Far East)

GANOPOL'SKY, V.I.; KRIVONOZHNIKOVA, L.G.; SHVAREV, V.S.

Spectrophotometric determination of cerium. Izv.vys.ucheb.zav.;
khim. i khim. tekhn. 6 no.6:913-917 '63. (MIRA 17:4)

1. Ural'skiy gosudarstvennyy universitet imeni Gor'kogo, kafedra
analiticheskoy khimii.

S/032/63/029/002/008/028
B101/B186

AUTHORS: Ganopol'skiy, V. I., Krivonozhnikova, L. G., and Shvarev, V.S.

TITLE: Use of complexone I for the spectrophotometric determination of cerium

PERIODICAL: Zavodskaya laboratoriya, v. 29, no. 2, 1963, 162

TEXT: Instead of K_2CO_3 , nitrilo triacetic acid (complexone I) is proposed as a much more intensive complex former capable of holding up to 1000 mg rare-earth oxides in solution in 25 ml. The nitrilo triacetate complexes of the rare-earth elements are formed in ammoniacal solution, Ce is oxidized with H_2O_2 , and the light absorption of the cerium complex is determined spectrophotometrically at 300 m μ . The light absorption follows Beer's law at CeO_2 concentrations from 1 to 32 μ g/liter. Coloring of the solution sets in within 40 min, and remains stable for 2 hrs. Up to 40 mg/ml of other rare-earth elements and small amounts of Ti, Fe, V, Cr, Mn, Co, and Ni do not interfere. The sensitivity is $3 \cdot 10^{-3}\%$

Card 1/2

S/032/63/029/002/008/028
B101/B186

Use of complexone I for the ...

using a cuvette 10 mm long, and $3 \cdot 10^{-4}\%$ using a 100 mm cuvette. The mean deviation is $\pm 2.5\%$.

Card 2/2

L 06589-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG
ACC NR: AP6029848 (A) SOURCE CODE: UR/0032/66/032/008/0907/0909

AUTHOR: Bondareva, T. N.; Shvarev, V. S.; Perkina, V. P. 46

ORG: Ural State University im. A.M. Gor'kiy (Ural'skiy gosudarstvennyy universitet) 8

TITLE: Photocalorimetric determination of cerium using phenylanthranilic acid 17

SOURCE: Zavodskaya laboratoriya, v. 32, no. 8, 1966, 907-909

TOPIC TAGS: colorimetric analysis, analytic chemistry, cerium, chemical composition, photochemistry

ABSTRACT: A photocalorimetric method of determining cerium contents in lanthanum oxide is described in detail. The method utilizes the phenylanthranilic acid as a complexing agent. The Ce(IV): phenylanthranilic acid ratio in the complex is constant and equal to 3:2. The molar extinction coefficient of this complex is $15.4 \cdot 10^3$. In essence, the method consists of dissolving of the lanthanum oxide sample in LnH_2SO_4 at pH = 3 followed by cerium extraction with a mixed solution of sodium diethyldithiocarbamate in ethylacetate. The photocalorimetric determination of the complex was made with an FEK-N-57 spectrophotometer. It is claimed that the absolute accuracy of the analysis is equal to $1.6 \cdot 10^{-1}\%$ for samples containing 0.005% Ce and is equal to $1.2 \cdot 10^{-2}\%$ for samples containing 0.2% Ce. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 07/ SUBM DATE: 00/ ORIG REF: 007/ OTH REF: 002

Card 1/1 UDC: 543.7

SHVAREV, V.V. (Moskva)

Strength of steel in case of an increasing amplitude of variable
stresses. Izv. AN SSSR. Mekh. mashinostr. no. 2:130-133
Mr-Ap '64.

(MIRA 17:5)

ACCESSION NR: AP4040994

S/0279/64/000/003/0173/0178

AUTHOR: Shvarev, V. V. (Moscow)

TITLE: Rapid determination of the endurance strength of steel under conditions of stress concentration

SOURCE: AN SSSR. Izvestiya. Metallurgiya i gornoye delo, no. 3, 1964, 173-178

TOPIC TAGS: endurance strength, steel endurance strength, endurance strength determination, endurance test, rapid endurance test, medium carbon steel, steel 45, chromium containing steel, 40Kh steel

ABSTRACT: In the search for the conditions and feasibility of the application of the N. A. Enomoto and L. Locati methods for the rapid approximate determination of the endurance strength and notch sensitivity of materials, smooth and notched specimens of normalized steel 45 (0.43% C, 0.56% Mn, 0.23% Si, 0.024% Cr) and steel 40Kh (0.39% C, 0.76% Mn, 0.26% Si, 0.87% Cr), oil-quenched and tempered at 200C with a hardness of 170—180 H₁₃ and 48—50 R_c, respectively, were subjected to rotating-beam fatigue tests with the stress

1/2

ACCESSION NR: AP4040994

amplitude increasing in steps. Test results showed that for both smooth and notched specimens the fracture stress δ_p , number of cycles to fracture n_p , the fracture stress-endurance strength ratio δ_p/δ_{-1} , and the sum of individual defects accumulated prior to fracture depend substantially on the rate of loading a . The value of the initial stress $\delta_0 \leq \delta_{-1}$, number of cycles $n_0 \leq 10^6$, and the degree of the stress amplitude increase $\Delta\delta_1 \leq 0.15\delta_{-1}$ have practically no effect on fatigue strength. A rate of loading $a = 2 \cdot 10^{-5} \text{ kg/mm}^2 \cdot \text{cycle}$ produced the most consistent test data in a comparatively short testing time of 2—4 hrs at ~3000 RPM. The values of the δ_p/δ_{-1} ratio are significantly affected by the level of local stress increases (the notch shape), but less affected by the kind of stress state. The level of the local stress increase and the kind of stress state have an insignificant effect on the sum of individual defects accumulated in the metal prior to fracture. Experimental verification of the derived relationships showed the endurance strengths determined by the above testing method and by conventional tests to differ by not more than $\pm 8\%$. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: none

Card 2/3

ACCESSION NR: AP4040994

SUBMITTED: 18Oct63

ATD PRESS: 3056

ENCL: 00

SUB CODE: MM

NO REF SOV: 005

OTHER: 003

Card 3 / 3